



CONTENTS OF VOLUME 19

Number 1

Methodical aspects of characterization of alginate and pectate by light scattering and viscometry coupled with GPC. GISELA BERTH (Germany)	1
Kinetic studies on enzymatic hydrolysis of celluloses for evaluation of amorphous structures Y. AKISHIMA, A. ISOGAI, S. KUGA, F. ONABE & M. USADA (Japan)	11
Chelating ability and enzymatic hydrolysis of water-soluble chitosans F. DELBEN, S. STEFANCICH & R. A. A. MUZZARELLI (Italy)	17
Preparation of cellulose-chitosan polymer blends A. ISOGAI (Japan) & R. H. ATALLA (USA)	25
Depolymerization of methyl pyrrolidinone chitosan by lysozyme RICCARDO MUZZARELLI (Italy)	29
Syntheses of some sulfur- and phosphorus-containing carbohydrate polymer derivatives MANSSUR YALPANI (Canada)	35
Contribution of the side branches to rheological properties of pectins JAEKWAN HWANG & JOZEF L. KOKINI (USA)	41
Enzymatic microassay for the determination and characterization of alginates KJETILL ØSTGAARD (Norway)	51
Summaries of UK Patent Applications	61
Bibliography	63
Book Reviews	73

Number 2

Post-fermentation processing conditions and solution properties of an extracellular fungal polysaccharide isolated from the culture filtrate of <i>Schizophyllum commune</i> FRÉDÉRIC ZENTZ & GUY MULLER (France)	75
Effect of moisture content on the melting and subsequent physical aging of cornstarch R. L. SHOGREN (USA)	83
Xanthan/locust bean gum interactions at room temperature RICHARD O. MANNION, COLIN D. MELIA (UK), BERNARD LAUNAY, GERARD CUVELIER (France), SANDRA E. HILL, STEVEN E. HARDING & JOHN R. MITCHELL (UK)	91
Structural and solution properties of corn cob heteroxylans A. EBRINGEROVÁ, Z. HROMÁDKOVÁ, J. ALFÖLDI (Czechoslovakia) & G. BERTH (Germany)	99
Swelling of the thermoplastically extruded potato starch-soybean protein mixtures—relation to extrudate structure DMITRY V. ZASYPKIN (Russia)	107
Studies on the intermolecular distribution of industrial pectins by means of preparative ion-exchange chromatography T. P. KRAVTCHENKO, A. G. J. VORAGEN & W. PILNIK (The Netherlands)	115
Structure of galactoglucomannan from <i>Populus monilifera</i> H. M. KUBAČKOVÁ, Š. KARÁCSONYI & L. BILISICS (Czechoslovakia)	125

Research Notes

Structural determination by means of gas chromatography-mass spectrometry of 3-O-(α -D-glucopyranosyluronic acid)-galactopyranose, an aldoiburonate acid derived from *Porphyridium* sp. polysaccharide 131
 NICULINA LUPESCU (Israel), JULIEN SOLO-KWAN,
 DANIEL CHRISTIAEN, HENRI MORVAN (France) &
 SHOSHANA (MALIS) ARAD (Israel)

N-Alanyl and some *N*-(*N'*-aryl)glycyl derivatives of chitosan 135
 SHIGEHIRO HIRANO, TAKASHI SAKAGUCHI &
 KOJI KURAMITSU (Japan)

Bibliography 139
 Book Reviews 149

Number 3

Analysis of wheat arabinoxylans from a large-scale isolation 151
 G. ANNISON, M. CHOCT & N. W. CHEETHAM (Australia)

Studies on fractionation and molecular weights of Chinese lacquer polysaccharide 161
 LINA ZHANG, XINGPING QIU, JINGJUAN XU, YUMIN DU,
 BAOGONG QIAN (China) & JOHN F. KENNEDY (UK)

Preparation of microcrystalline cellulose aminoderivatives 167
 MIROSLAV ANTAL (Czechoslovakia) & M. MICKO (Canada)

Preparation of bacterial cellulose containing N-Acetylglucosamine residues 171
 RYU OGAWA & SEIICHI TOKURA (Japan)

Transitions in frozen gelatinized-starch systems studied by differential scanning calorimetry 179
 HUA LIU & JOHN LELIÈVRE (Canada)

Two-step hydrolyses of a polymeric drug under a model system 185
 S. TOKURA, Y. KANEDA, Y. MIURA & Y. URAKI (Japan)

Electron microscopical examinations of grafted nitrocellulose 191
 LIE-GUI TANG, YU-QIN ZHU (China) & J. F. KENNEDY (UK)

Analysis of carrageenans by enzymic degradation, gel filtration and ^1H NMR spectroscopy 199
 SVEIN H. KNUTSEN & HANS GRASDALEN (Norway)

Dynamic rheological studies on an interaction between lipid and various native hydroxypropyl potato starches 211
 HAK RYANG KIM, ANN-CHARLOTTE ELIASSON &
 KÅRE LARSSON (Sweden)

Bibliography 219
 Book Reviews 229

Number 4

Modified chitosans carrying sulfonic acid groups 231
 RICCARDO A. A. MUZZARELLI (Italy)

Improvement of the selective depolymerization of pectic substances by chemical β -elimination in aqueous solution 237
 T. P. KRAVTCHEKO, I. ARNOULD, A. G. J. VORAGEN &
 W. PILNIK (The Netherlands)

Hydrodynamic properties of the fractions of mannan formed by *Rhodotorula rubra* yeast 243
 G. M. PAVLOV, E. V. KORNEEVA, N. A. MICHAILOVA &
 E. P. ANANYEVA (Russia)

Low-viscosity α -D-glucan fractions derived from sucrose which are resistant to enzymatic digestion GREGORY L. COTE (USA)	249
The influence of pH on the viscous behaviour of starch-poly(ethylene-co-acrylic acid) complexes. G. F. FANTA, F. R. DINTZIS, E. B. BAGLEY & D. D. CHRISTIANSON (USA)	253
Effect of galactomannan addition on the thermal behaviour of κ -carrageenan gels P. B. FERNANDES, M. P. GONÇALVES (Portugal) & J. L. DOUBLIER (France)	261
A study of the effect of water on the glass transition of 1:1 mixtures of amylopectin, casein and gluten using DSC and DMTA M. T. KALICHEVSKY & J. M. V. BLANSHARD (UK)	271
Temperature dependence of the elastic modulus of alginate gels STØRKER T. MOE, KURT I. DRAGET, GUDMUND SKJÅK-BRÆK & OLAV SMIDSRØD (Norway)	279
Studies on isolation and characterization of starch from oat (<i>Avena nuda</i>) grains R. HOOVER & T. VASANTHAN (Canada)	285
Bibliography	299
Book Reviews	307

